AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application. Applicants have amended Claims 1, 4-17 and 19-24 in the following, in which added texts are underlined and deleted texts are stricken through. Applicants have also added new claims 25-31.

1. (Currently amended) An expression vector comprising:~~,~~[-]

an OmpF promoter;~~,~~

an OmpF gene encoding all or a fragment of the OmpF protein:~~gene,~~

a cleavage-site gene~~cleavage site,~~ encoding an RNA or protein cleavage site; and

a gene of interest encoding a protein of interest,

wherein the expression vector encodes~~ing~~ a fusion protein comprising the OmpF protein, the cleavage site and the protein of interest, and wherein the cleavage-site gene ~~said cleavage site~~ is located between ~~separates~~ the OmpF gene ~~or fragment from~~ and the gene of interest in the expression vector such that the RNA or protein cleavage site is located between the OmpF protein and the protein of interest in the fusion protein.~~, and wherein said expression vector produces an OmpF fusion protein fused with the gene of interest.~~

2. (Original) The expression vector of Claim 1, further comprising a selectable marker.

3. (Original) The expression vector of Claim 1, wherein said selectable marker is ampicillin resistance.

4. (Currently amended) The expression vector of Claim 1, wherein said cleavage site is configured to be cleaved by an RNase or a protease.

5. (Currently amended) The expression vector of Claim ~~1~~ 4, wherein said protease is selected from the group consisting of: Factor Xa, enterokinase, IgA protease, intein, genenase, thrombin, trypsin, pepsin, subtilisin, and plasmin.

6. (Currently amended) The expression vector of Claim 1, wherein said ~~gene~~protein of interest is selected from the group consisting of: a polypeptide, a protein, an enzyme, or an antibody.

7. (Currently Amended) The expression vector of Claim 6, wherein said protein of interest comprises ~~is~~ β-endorphin.

8. (Currently Amended) The expression vector of Claim 1, wherein said expression vector is pOmpF6 ~~deposited with the Korean type culture Collection for Type cultures~~ contained in the deposition made under accession number KCTC 1026BP.

9. (Currently amended) The expression vector of Claim 1, wherein said OmpF gene ~~or fragment~~ comprises the signal sequence.

10. (Currently amended) A ~~host~~ microorganism transformed with the expression vector of Claim 1.

11. (Currently amended) The ~~host~~ microorganism of Claim 10, wherein said ~~host~~ microorganism ~~is~~ comprises *Escherichia sp.*

12. (Currently amended) The ~~host~~ microorganism of Claim 10, wherein said ~~host~~ microorganism ~~is~~ comprises *Salmonella sp.*

13. (Currently amended) The ~~host~~ microorganism of Claim 10, wherein said ~~host~~ microorganism lacks the OmpF gene other than the OmpF gene comprised within the expression vector.

14. (Currently amended) The ~~host~~ microorganism of Claim 10, wherein said ~~cell~~ microorganism comprises ~~is~~ *E. coli* BL101/pOmpF6 deposited ~~with the Korean type culture Collection for Type cultures~~ under accession number KCTC 1026BP.

15. (Currently amended) A method for the production of a protein of interest, comprising:

~~ntroducing the protein of interest into the vector of Claim 1 producing an expressible OmpF fusion protein;~~

~~introducing the vector into a host microorganismproviding a microorganism transformed with the expression vector of Claim 1;~~

~~growingculturing the host microorganism in media;a culture medium, thereby producing the fusion protein the medium; and~~

~~purifying an OmpFseparating at least part of the fusion protein from the mediamedium;~~

~~cleaving the OmpFfusion protein at the cleavage site using an enzyme appropriate forconfigured to selectively cleave the cleavage site; and~~

~~purifyingcollecting the protein of interest cleaved from the fusion protein.~~

providing a microorganism transformed with the expression vector of Claim 1;

culturing the microorganism in a culture medium, thereby producing the fusion protein the medium; and

separating at least part of the fusion protein from the medium.

16. (Currently amended) The method of Claim 15, wherein the ~~host~~ microorganism does not express OmpF protein in the absence of the expression vector.

17. (Currently amended) The method of Claim 15, wherein the ~~host~~ microorganism ~~is~~ comprises *Escherichia sp.* or *Salmonella sp.*

18. (Original) The method of Claim 17, wherein the *Escherichia sp.* is *E. coli*.

19. (Currently amended) The method of Claim ~~18~~15, wherein the microorganism comprises *E. coli* ~~is~~ BL101/pOmpF6 deposited under accession number KCTC 1026BP.

20. (Currently amended) The method of Claim ~~15~~25, wherein the enzyme is an RNase or a protease.

21. (Currently amended) The method of Claim ~~15~~20, wherein the protease is selected from the group consisting of: Factor Xa, enterokinase, genenase, IgA protease, intein, thrombin, trypsin, pepsin, subtilisin, and plasmin.

22. (Currently amended) The method of Claim 15, further comprising removing the ~~host~~ microorganism from the media.

23. (Currently amended) The method of Claim 15, wherein said ~~purifying~~ separating of the OmpF fusion protein from the media comprises using anion-exchange chromatography.

24. (Currently amended) The method of Claim 15, wherein said ~~purifying~~ collecting of the protein of interest ~~is by~~ comprises using reverse-phase HPLC.

25. (New) The method of Claim 15, further comprising cleaving the fusion protein at the cleavage site using an enzyme configured to selectively cleave the cleavage site.

26. (New) The method of Claim 25, further comprising collecting the protein of interest cleaved from the fusion protein.

27. (New) A fusion protein, comprising:

an OmpF protein comprising full size OmpF protein or a fragment thereof;

a protein of interest; and

an RNA or protein cleavage site located between the OmpF protein and the protein of interest.

28. (New) The fusion protein of Claim 27, wherein the cleavage site is configured to be cleaved by an enzyme.

29. (New) The fusion protein of Claim 28, wherein the enzyme is an RNase or a protease.

30. (New) The fusion protein of Claim 29, wherein the protease is selected from the group consisting of: Factor Xa, enterokinase, genenase, IgA protease, intein, thrombin, trypsin, pepsin, subtilisin, and plasmin.

31. (New) The fusion protein of Claim 27, wherein the protein of interest comprises β-endorphin.